No.



200300129

THER UNITHERD SHAVES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Monsanto Jechnology XIG

MICCORS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN RODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY STECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'0096838'

In Testimony Murror, I have hereunto set my hand and caused the seal of the Hant Burista Hrotection Office to be affixed at the City of Washington, D.C. this fifth day of September, in the year two thousand three.

Benze-

Commissioner Plant Variety Protection Office Agricultural Marketing Service y of Sgriculture

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued

| NAME OF OWNER Monsanto Technology LLC | | | | 2 TEMPORARY DESIGNATION OR EXPERIMENTAL NAME DAK2301A3R | | 3. VARIETY NAME 0096838 |
|---|--|--|--|--|--|---|
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 634 E. Lincoln Way | | | 5. TELEPHONE (include area code) 0 (515) 232-7170 | | , L U U | FOR OFFICIAL USE ONLY OVPO NUMBER |
| Ames, IA | 50010 | | | 6. FAX (include area code) | | • |
| | | | | (515) 232-690 |)5 | ILING DATE |
| | | · · | | (0.10) 202 000 | · ' | • |
| 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) 8. IF INCORPORA STATE OF INCORPORA | | | TED, GIVE 9. DATE OF INCORPORATION | | ON | 2/4/2003 |
| Limited Liability | Company | | | | | |
| 10. NAME AND ADDRESS OF OWNER RE | PRESENTATIVE(S) TO SERVE IN TH | IIS APPLICATION. (Fi | rst person listed will r | receive all papers) | | FILING AND EXAMINATION FEES: |
| Donald Steffen 634 E. Lincoln W | /ay | | er er er er er er er er | en e | | s 2, 705.00 |
| Ames, IA 50010 |) | | | and the control of the second | | DATE 2/4/2003 |
| | | | | | | certification fee: \$43000 DATE 1/22/03 |
| 11. TELEPHONE (Include area code) | 12. FAX (Include area code) | 13. E-M | AIL | The state of the s | 14. CROP KI | ND (Common Name) |
| (515) 956-3002 | (515) 232-6905 | don | ald.e.steffen(| @monsanto.com | | Soybean |
| 15. GENUS AND SPECIES NAME OF CROI | | • | | | 47 JC TUE V | ARIETY A FIRST GENERATION |
| Glycine max (L.) M | the first section of the first section of | $\gamma_{ij} = -2\gamma_{ij}$ | illy name <i>(Botanic</i> abaceae (Le) | | HYBRID? | YES NO |
| verification that tissue culture verpository) g. Filing and Examination Fee (\$ States" (Mail to the Plant Varie) 22. HAS THE VARIETY (INCLUDING ANY HEROM THIS VARIETY BEEN SOLD, DISTOTHER COUNTRIES? YES IF YES, YOU MUST PROVIDE THE DATFOR EACH COUNTRY AND THE CIRCLE | ctness on of Variety on of the Variety (Optional) usis of the Owner's Ownership untreated seeds or, for tuber propaga will be deposited and maintained in an 2,705), made payable to "Treasurer of ty Protection Office) ARVESTED MATERIAL) OR A HYBR POSED OF, TRANSFERRED, OR US NO TE OF FIRST SALE, DISPOSITION, TI MSTANCES. (Please use space indi | approved public the United ID PRODUCED ED IN THE U. S. OR RANSFER, OR USE cated on reverse.) | 20. DOES THE OVARIETY BE IF YES, WHI 21. DOES THE OLIMITED AS IF YES, SPENUMBER 1, (If additional 23. IS THE VARI PROPERTY YE IF YES, GIVE REFERENCE | ES (If "yes", answer items 20 and 21 below) DWNER SPECIFY THAT SEED ELIMITED AS TO NUMBER OF ELIMITED AS TO NUMBER OF TOUNDAY DWNER SPECIFY THAT THE COUNTY THE SEED EXPLANATION FOUNDAT 2, 3, etc. EXPLANATION IS NECESSARY, please IETY OR ANY COMPONENT OF RIGHT (PLANT BREEDER'S RIGHT (PLANT BREEDER'S RIGHT) ES COUNTRY, DATE OF FILING COUN | OF THIS CLASSES? ATION RE LASSES BE IS? ION R Use the space in THE VARIETY GHT OR PATEN NO DR ISSUANCE A ndicated on rever | O (If "no," go to item 22) YES NO GISTERED CERTIFIED YES NO EGISTERED CERTIFIED Indicated on the reverse.) PROTECTED BY INTELLECTUAL (17)? |
| 24. The owners declare that a viable sample for a tuber propagated variety a tissue cu. The undersigned owner(s) is(are) the owner(s) report the properties and is entitled to protection under the properties. | ner of this sexually reproduced or tube visions of Section 42 of the Plant Vari | r propagated plant var ety Protection Act. | iety, and believe(s) t | | | |
| Owner(s) is(are) informed that false repre | | | | | | |
| | | | SIGNATURE OF | OWNER | | · · · · · · · · · · · · · · · · · · · |
| Owner(s) is(are) informed that false repre | | | SIGNATURE OF NAME (Please pr. | | | |
| Owner(s) is(are) informed that false repre | | | | | | |

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
- U.S. Patent No. 5,776,760. Issue Date: July 7, 1998. Assignee: Monsanto Company. Patent Application No. 484,274.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/ls-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whiten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

MONSANTO TECHNOLGY LLC PVP APPLICATION - 0096838

EXHIBIT A

ORIGIN AND BREEDING HISTORY

1997 - Final cross was made in 1998 at Ames, Iowa.

Parentage: A2553/AG2903

Source of glyphosate tolerance is AG2903 = ST2250/4/A4539/3/A3431*2//A3242/40-3-2

- 1997 F1 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1998 F2 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1998 F3 bulk populations were grown at Ames, Iowa and single plants pulled.
- 1999 F3 derived F4 plants were grown at Rancagua, Chile in progeny rows and variety 0096838 was selected.
- 1999 F3:5 breeder seed was grown at Ames, Iowa for progeny row increase and in yield tests at 4 location in Iowa.

Variety 0096838 was observed to be uniform and stable for the characteristics described within this application based on our observations since 1999 and, henceforth, to present. No variants were observed during this time.

Variety 0096838 has continued to be grown in yield tests at 12 locations in 2000 and 23 locations in 2001 for comparison against other varieties to determine how it would be used in our marketing program.

Selections made based on yield and overall plant performance (87:5/24/2003 per applicant's request pertelephone conversation on 3/3/2003).

MONSANTO TECHNOLGY LLC PVP APPLICATION - 0096838

EXHIBIT B

NOVELTY STATEMENT

To our knowledge, the soybean varieties that closely resemble 0096838 are A2247, and SN79596:

| 1. Pod Wall color | 0096838 | - Brown |
|-------------------------------------|---------|-------------------|
| | A2247 | - Brown |
| | SN79596 | - Tan |
| 2. Hilum color | 0096838 | - Imperfect Black |
| | A2247 | - Yellow |
| | SN79596 | - Imperfect Black |
| 3. RR TM gene | 0096838 | - Present |
| (Tolerance to glyphosate herbicide) | A2247 | - Absent |
| , | SN79596 | - Present |

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marrial or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-729-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

| NAME OF APPLICANT(S) | Monsanto Technology | LLC | FRO | R OFFICIAL USE ONLY |
|---------------------------------|--|----------------------------------|--|--|
| ADDRESS (Street and No. or R.) | F.D. No., City, State, and ZIP Code) | | The state of the s | ролимв 2 0 0 3 0 0 1 2 . |
| | 634 E. Lincoln Way Ames, IA 50010 | | VA | RIETY NAME |
| | | | TE | MPORARY OR EXPERIMENTAL DESIGNATION DAK2301A3R |
| PLEASE READ ALL INSTI | RUCTIONS CAREFULLY: Place the app | propriate number that describ | es the varietal character of this v | ariety in the boxes below. |
| Place a zero in the first box (| e.g. 099 or 09) when num | ber is either 99 or less or 9 or | less respectively. Data for quant | titative |
| plant characters should be ba | ased on a minimum of 100 plants. Comp | arative data should be determ | ined from varieties entered in the | e same trial. Royal |
| Horticultural Society or any | recognized color standard may be used to | determine plant colors; desig | nate system used: | |
| | or your variety; lack of response may dela | y progress of your application | n. | |
| A. MORPHOLOGY | <u>'</u> | | | |
| Seed Shape: | | | | |
| 3 = Elon | T, and T /W ratios < 1.2) | (L/W ratio 4 = Elonga | cal-Flattened > 1.2; L/T ratio < 1. te-Flattened > 1.2;T/W ratio > 1.2 | |
| Seed Coat Color: | | | · | |
| 1 1 = Yello | ow 2 = Green | 3 = Brown | 4 = Black | 5 = Other (Please Specify) |
| Seed Coat Luster: | | | | |
| 1 1 = Dull | 2 = Shiny | | | |
| Seed Size: | | | | |
| | grams/100 seeds | | | |
| Hilum Color: | | | | |
| 5 1 = Buff 6 = Black | | | 4 = Gray | 5 = Imperfect Black |
| Cotyledon Color: | | | | |
| 1 1 = Yello | ow 2 = Green | | • | |

A. MORPHOLOGY (Continued)

Seed Protein Peroxidase Activity:

$$1 = Low$$

$$2 = High$$

Hypocotyl Color:

Leaf Shape:

$$3 = Ovate$$

Flower Color:

Pod Color:

$$3 = Black$$

Pubescence Color:

$$2 = Brown (Tawny)$$

Plant Habit:

Maturity Group:

$$2 = 00$$

 $7 = IV$
 $12 = IX$

$$3 = 0$$
$$8 = V$$
$$13 = X$$

Maturity Subgroup:

Please enter a value from 0 - 9

B. DISEASE REACTIONS

$$0 = Not Tested$$

$$3 = Tolerant$$

Bacterial

- Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)
- Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)
- Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

Fungal

0 Brown Spot (Septoria glycines Hemmi)

| В. 1 | DISEASE REA | CTIONS | S (Continue | <i>d</i>) | 0 = Not Tested | l. 1 = | = Suscep | tible $2 = Re$ | es i2a0 | 0_{3} | 610ant 29 |
|-------|----------------|-------------------|-------------------------|------------|------------------|------------|-----------------|-------------------|----------------|---------|-----------|
| | Frogeye Lea | af Spot (| (Cercospora | sojina | Hara) | | | | | | |
| | race 1 | | | 0 | race 2 | | 0 | race 3 | rue** | 0 | race 4 |
| | race 5 | | - | 0 | race 6 | | | Other (Please S | pecify) | | |
| 0 | Target Spot | t (Coryno | espora cassi | icola (I | Berk. & Curt.) | Wei) | | | | | i . |
| 0 | Downey Mi | ldew (Pe | eronospora i | trifolio | rum var. manc | hurica (N | laum.) S | yd. ex Gäum) | | | |
| 0 | Powdery M | ildew (M | licrosphaero | a diffus | ea Cke. & Pk.) | | | | | | |
| 1 | Brown Stem | ı Rot (P | hialophora _l | gregata | (Allington & C | Chamber | lain) W. | Gams.) | | | |
| 0 | Stem Canke | er (<i>Diapo</i> | orthe phased | olorum | (Cke. & Ell.) S | Sacc. var | . caulivoi | ra Athow & Cal | dwell) | | |
| 0 | Pod and Ste | m Bligh | t (<i>Diaporth</i> | e phase | olorum (Cke. & | & Ell.) Sa | ıcc. var. | sojae (Lehman) | Wehm | .) | |
| 0 | Purple Seed | Stain (0 | Cercospora i | kikuchi | i (T. Matsu. & | Tomoya | su) Gard | lener) | | | |
| 0 | Rhizoctonia | Root Ro | ot (<i>Rhizocto</i> | nia sol | <i>ani</i> Kühn) | | | | | | · |
| Phyto | phthora Root l | Rot (Phy | tophthora n | negasp | erma Drechs. f. | . sp. glyc | <i>inea</i> (Ku | an & Erwin)) | | | |
| 2 | race 1 | 2 | race 8 | | 2 race 15 | 2 | race 22 | | | · | |
| 2 | race 2 | 2 | race 9 | 1 | race 16 | 2 | race 23 | | | | |
| 2 | race 3 | 2 | race 10 | | race 17 | 2 | race 24 | | | | |
| 2 | race 4 | 2 | race 11 | | race 18 | 1 | race 25 | | • | | |
| 2 | race 5 | 1 | race 12 | 1 | race 19 | 2 | race 26 | | * | | |
| 2 | race 6 | 2 | race 13 | 1 | race 20 | 1 | Other (| Please Specify) : | | | |
| 2 | race 7 | 2 | race 14 | 2 | race 21 | | | | | | |
| 0 | Bud Blight (| Tobacco | Ringspot | Virus) | .03 (15) | : : | | | | | |
| 0 | Yellow Mosa | nic (Bear | n Yellow M | osaic V | irus) | | | | | | |
| 0 | Cowpea Mos | saic (Cov | wpea Chlor | otic Vi | rus) | | | | | | |
| | Pod Mottle (| Roon Do | d Mottle V | irnel | | | | | | | |

| B. DISEASE REACTIONS (Continued) | 0 = Not Tested | 1 = Susceptible | 200300129 2 = Resistant 3 = Tolerant . |
|--|-----------------------------|----------------------|--|
| 0 Seed Mottle (Soybean Mosaic Viru | ıs) | | · Martine of Marca in parties and resource course course in mining in |
| Nematode | | | The state of the s |
| Soybean Cyst Nematode (Heterodera glycin | es Ichinohe) | | |
| | <i>,</i> | | |
| 0 race 1 0 race 4 | 0 race | 9 | • |
| 0 race 2 0 race 5 | 3 race | 14 (former r. 4) | |
| 3 race 3 0 race 6 | Other | r (Please Specify) | |
| 0 Lance Nematode (Hoplolaimus colu | umbus Sher) | | |
| 0 Southern Root Knot Nematode (M | eloidogyne incognita | (Kofoid & White) Chi | itwood) |
| 0 Northern Root Knot Nematode (M | <i>eloidogyne hapla</i> Chi | .twood) | |
| 0 Peanut Root Knot Nematode (Melo | oidogyne arenaria (Ne | eal) Chitwood) | |
| 0 Reniform Nematode (Rotylenchus 1 | eniformus Linwood & | & Olivera) | |
| Javanese Nematode (Meloidogyne j | avanica (Treub) Chit | wood) | |
| Other Nematode (Please Specify) | | | |
| C. PHYSIOLOGICAL RESPONSES | 0 = Not Tested | 1 = Susceptible | 2 = Resistant 3 = Tolerant |
| 3 Iron Chlorosis on Calcareous Soil | | | |
| 0 Phosphorus | | | |
| Thosphorus | | | |
| 0 Boron | | | |
| · | | | |
| 0 Boron | | | |
| 0 Boron 0 Aluminum | | | |

200300129

| D. INSECT REACTIONS | 0 = Not Tested | 1 = Susceptible | 2 = Resistant | 3 = Tolerañt |
|--|--|--|---------------------|--|
| 0 Mexican Bean Beetle (Epilachna vo | arivestis Mulsant) | | . vagyytánníse | anay magaalaan ka dha asaay iyo aalaa sayay iyo aalaa sayay iyo aalaa sayay ahaa aa |
| O Potato Leaf Hopper (Empoasca fai | bae (Harris)) | | | ÷ |
| Other (Please Specify) | | ************************************** | | |
| E. HERBICIDE REACTIONS | 0 = Not Tested | 1 = Susceptible | 2 = Resistant | |
| 2 Metribuzin | | | | |
| 0 Bentazone | | | | |
| 1 Sulfonylurea | | | | |
| 2 Glyphosate | | | | |
| 1 Glufosinate | | | | |
| 0 Pendimethalin | | | | \$ |
| Other (Please Specify) | | | | |
| F. TRANSGENIC COMPOSITION | And the second s | | | |
| Has the development of the Subject Variety If yes, please complete the following inform | | _ | | YES NO |
| Please state the vector's name: Please state the vector components: | | | | |
| 3. Please describe the genetic material suc4. Please describe the insertion protocol: | cessfully transferred | into the Subject Var | iety: | |
| * A literature citation(s) explaining the fo | _ | ests above may be an | acceptable alternat | ive to completion of |
| | | | | |
| U.S. Patent No. 5,776,760. Issue Date: Ju Monsanto Company. Patent Application N | | r: Barry, Gerard, an | d Kishore, Ganesh. | Assignee: |
| ABSTRACT: Genes encoding a glyphosate transformed bacteria and plants which deginerbicide. | | | _ | _ |

G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

MONSANTO TECHNOLGY LLC PVP APPLICATION - 0096838

EXHIBIT D

ADDITIONAL DESCRIPTION OF INVENTION

0096838 is an early maturity group II variety with resistance to Roundup tm herbicide. It has very high yield potential. It has superior yields to lines of similar maturity and has excellent agronomic characteristics, including lodging resistance. In tests, it has beaten Asgrow AG1901 by 118 % overall, winning at 16 of 24 locations. It is adapted to the early maturity group II growing areas of South Dakota, Minnesota, Iowa, Michigan, Ontario, Nebraska, Illinois, and Wisconsin. It has only average appearance.

| REPRODUCE LOCALLY. Include form number and edition date on all reproduct | tions. | FORM APPROVED - OMB No. 0581-005 |
|--|---|--|
| U.S. DEPARTMENT OF AGRICULTURE | | , |
| AGRICULTURAL MARKETING SERVICE | Application is required in order to det certificate is to be issued (7 U.S.C. 2 | 421). The information is held |
| EXHIBIT E | confidential until the certificate is issu | ied (7 U.S.C. 2426). |
| STATEMENT OF THE BASIS OF OWNERSHIP | | |
| 1. NAME OF APPLICANT(S) | 2. TEMPORARY DESIGNATION | 3. VARIETY NAME |
| | OR EXPERIMENTAL NUMBER | |
| Monsanto Technology LLC | DAK2301A3R | 0096838 |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) | 5. TELEPHONE (Include area code) | 6. FAX (Include area code) |
| 634 E. Lincoln Way | (515) 232-7170 | (515) 232-6905 |
| Ames, IA 50010 | | |
| , | 7. PVPO NUMBER | |
| | 2 (| 00300128 |
| 8. Does the applicant own all rights to the variety? Mark an "X" in the | he appropriate block. If no please exp | lain. |
| The second special second seco | and appropriate blook. It its, produce oxp | X |
| | | The second secon |
| O to the confirm of find into the confirmation of the confirmation | | |
| Is the applicant (individual or company) a U.S. National or a U.S. | based company? If no, give name of | country. YES NO |
| 10. Is the applicant the original owner? | NO If no, please answer one o | f the following: |
| <u>x</u> | | |
| a. If the original rights to variety were owned by individual(s), is | (are) the original owner(s) a U.S. Nation | nal(s)? |
| | NO If no, give name of country | |
| | | • |
| b. If the original rights to variety were owned by a company(ies |), is (are) the original owner(s) a U.S. ba | sed company? |
| | NO If no, give name of country | |
| | • | |
| 11. Additional explanation on ownership (If needed, use the reverse | for extra enaca): | |
| | TOT GATE Spacey. | |
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| PLEASE NOTE: | | |
| Plant variety protection can only be afforded to the owners (not licen- | soon) who most the following criteries | |
| riant variety protection can only be anorded to the owners (not licen | sees) who meet the following criteria: | |
| If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of | | |
| 2. If the rights to the variety are owned by the company which emplo | ared the original hyperday/s) the same | y must be It C beand award by |
| nationals of a UPOV member country, or owned by nationals of a genus and species. | | |
| 3. If the applicant is an owner who is not the original owner, both the | original owner and the applicant must n | neet one of the above criteria. |
| The second se | | |
| The original breeder/owner may be the individual or company who di Act for definitions. | rected the final breeding. See Section 4 | 11(a)(2) of the Plant Variety Protection |
| According to the Paperwork Reduction Act of 1995, an agency may no conduct or sponsor, control number. The valid OMB control number for this information collection is 0581-0055, response, including the time for reviewing the instructions, searching existing data sources, | . The time required to complete this information cotle | ction is estimated to average 6 minutes per |
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